

What is claimed is:

1. A contents rental system, comprising:
a content producer for producing a content;
a rental business server, disposed in a store managed by a rental
5 business operator, for recording the content produced by said content
producer and downloading the contents to a record medium corresponding to
a command issued by a customer; and
a reproducing device, disposed in a house of the customer, for
reproducing the contents from the record medium.
- 10 2. The content rental system as set forth in claim 1,
wherein said rental business operator records an advertisement
picture to the record medium along with the content.
- 15 3. The content rental system as set forth in claim 2,
wherein when an icon contained in the advertisement picture is
clicked, said reproducing device is connected to an advertisement server
through the Internet.
- 20 4. The content rental system as set forth in claim 1,
wherein the record medium comprises:
a content storing portion for storing the content encrypted;
a memory for storing a decryption key for decrypting the content
encrypted; and
25 a capacitor for backing up said memory,
wherein said capacitor is charged by said rental business server.
5. The content rental system as set forth in claim 1,
wherein the record medium comprises:

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a content storing portion for storing the content;
a memory for storing a control algorithm for reading the content;
and
a capacitor for backing up said memory,
5 wherein said capacitor is charged by said rental business server.

6. The content rental system as set forth in claim 1,
wherein the record medium comprises:
a content storing portion for storing the content encrypted;
10 a memory for storing a decryption key for decrypting the content;
and
a timer for causing the decryption key stored in said memory to be
erased when a predetermined time period elapses after the record medium
is connected to said rental business server.

15 7. The content rental system as set forth in claim 1,
wherein the record medium comprises:
a content storing portion for storing the content;
a memory for storing a control algorithm for reading the content;
20 and
a timer for causing the control algorithm stored in said memory to be
erased when a predetermined time period elapses after the record medium
is connected to said rental business server.

25 8. The content rental system as set forth in claim 6 or 7, further
comprising:
a capacitor, charged by said rental business server, for supplying a
power to said timer.

9. A content rental system for downloading a content to a record medium of a customer and managing security of the content corresponding to data stored in an IC card of the customer, comprising:

a content producer for producing the content;

5 a management center for delivering the content produced by said content producer to a plurality of rental business operators;

a rental business server, disposed in a store managed by each of the rental business operators, for recording the content delivered from said management center, downloading the recorded content to the record

10 medium corresponding to a command issued by the customer, and managing the security of the content corresponding to the data stored in the IC card; and

a reproducing device, disposed in a house of the customer, for restoring the content from the record medium and managing the security of the content corresponding to the data stored in the IC card.

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10. The content rental system as set forth in claim 9,

wherein when the IC card is set to said reproducing device, said reproducing device authenticates the IC card and the IC card authenticates said reproducing device.

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11. The content rental system as set forth in claim 10,

wherein said reproducing device is authenticated by a process in which said reproducing device transmits a reproducing device public key certificate to the IC card and the IC card authenticates the reproducing device public key certificate, and

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wherein the IC card is authenticated by a process in which the IC card transmits an IC card public key certificate to said reproducing device and said reproducing device authenticates the IC card public key certificate.

12. The content rental system as set forth in claim 10,
wherein said reproducing device is authenticated in such a manner
that the IC card encrypts a random number using a reproducing device
5 public key and transmits the encrypted random number to said reproducing
device, that said reproducing device decrypts the encrypted random number
using a reproducing device secret key and transmits the decrypted random
number to the IC card, and that the IC card authenticates said reproducing
device using the decrypted random number.

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13. The content rental system as set forth in claim 10,
wherein the IC card is authenticated in such a manner that said
reproducing device encrypts a random number using an IC card public key
and transmits the encrypted random number to the IC card, that the IC
15 card decrypts the encrypted random number using an IC card secret key
and transmits the decrypted random number to said reproducing device,
and that said reproducing device authenticates the IC card using the
decrypted random number.

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14. The content rental system as set forth in claim 9,
wherein when the IC card is set to said rental business server, said
rental business server authenticates the IC card in cooperation with said
management center.

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15. The content rental system as set forth in claim 14,
wherein the IC card is authenticated by a process in which the IC
card transmits an IC card public key certificate to said management center
through said rental business server and said management center
authenticates the IC card public key certificate.

16. The content rental system as set forth in claim 14,
wherein the IC card is authenticated in such a manner that said
management center encrypts a random number using an IC card public key
5 and transmits the encrypted random number to the IC card through said
rental business server, that the IC card decrypts the encrypted random
number using an IC card secret key and transmits the decrypted random
number to said management center through said rental business server, and
that said management center authenticates the IC card using the decrypted
10 random number.

17. The content rental system as set forth in claim 14,
wherein when the IC card is set to said rental business server, the
IC card transmits a reproducing device public key certificate to said
15 management center through said rental business server and said
management center authenticates said reproducing device corresponding to
the reproducing device public key certificate.

18. The content rental system as set forth in claim 9,
20 wherein when the record medium and the IC card are set to said
rental business server and the customer selects a content, said rental
business server transmits contract information to the IC card,

the IC card encrypts the contract information and transmits the
encrypted contract information to said management center through said
25 rental business server,

after said management center decrypts the encrypted contract
information and authenticates the contract information, said management
center encrypts an encryption key of the content selected by the customer

and transmits the encrypted content to the IC card through said rental business server,

after the IC card decrypts the encrypted content encryption key and authenticates the content, the IC card transmits a normal completion

5 message to said rental business server, and

said rental business server receives the normal completion message and downloads the content to the record medium.

19. The content rental system as set forth in claim 9,

10 wherein when the record medium and the IC card are set to said reproducing device, said reproducing device transmits a content encryption key transmission request to the IC card,

the IC card receives the transmission request, encrypts a content encryption key, and transmits the encrypted content encryption key to said
15 reproducing device, and

after said reproducing device decrypts the encrypted content encryption key and authenticates the decrypted content encryption key, said reproducing device reproduces the content using the decrypted content encryption key.

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